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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DELGADO, MICHAEL A	

ART UNIT	PAPER NUMBER
2144	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/680,122	DEEN ET AL.	
	Examiner	Art Unit	
	Michael S. A. Delgado	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/15/2004 has been entered.

Response to Arguments

1. Applicant's arguments, see Pages 22-25, filed 07/15/2004, with respect to the rejection(s)of claim(s) 1-35 under 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of US Patent No. 5,987,100 by Fortman et al and US patent 6,704,786 by Gupta et and US Patent No. 6,577,618 by Diachina.

AFFIDAVIT

2. The affidavit filed on 02/27/2004 under 37 CFR 1.131 is sufficient to overcome the US 6,574,630 by Augustine reference.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9 and 19-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,987,100 by Fortman et al and US patent 6,704,786 by Gupta et al in view of US Patent No. 6,577,618 by Diachina.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In Claim 1, Fortman teaches about a network system including a server system "Message Center", a client system "subscriber", and one or more other network devices (Fig 2), wherein the server system monitors the occurrence of events, sends notification data to the client system, when notification has been requested (act of subscription), after one of the monitored events occurs, and may have client data requiring transmission to the client system, a method for efficiently sending notification to the client system when the event has occurred, so as to preserve the processing capacity of the server system and the client system, and so as to preserve bandwidth on the network system, the method comprising (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between

server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art) (Col 2, lines 45-55):

an act of the server system determining that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Col 2, lines 45-55);

an act of the server system attempting to receive contact from the client device using a connection-oriented protocol "ISDN" when the server system has client data to transmit to the client system (Col 2, lines 50-55) (Col 3, lines 60-65); and

an act of the server system transmitting the client data to the client system using the connection-oriented protocol, after the server system receives contact using the connection-oriented protocol (Col 2, lines 50-55) (Col 3, lines 60-65).

but does not explicitly teach about the server system sending notification data using a connectionless protocol to the client system, if one of the monitored events occurs.

In the communication art there are two modes of connection. They're are the connected oriented and the connectionless type. Each connection protocol has its advantages and disadvantage, which are well known in the art and is disclosed by Diachina (Col 1, line 55- Col 2, line 10) and Gupta (Col 1, lines 20-30) (Col 2, lines 5-15). It would have been obvious at the time of the invention for some one of ordinary skill to use a connectionless protocol in order to reduce the amount of overhead and time that are used when a notification is sent to a client.

Notification information is short and bursty in nature and using the connection less protocols is well suited for an operation of this kind. The process to connect and disconnect is minimal and most efficient, which requires less overhead. The connection-oriented protocol is

inefficient for this kind of operation as a lot of resources and time are used to set up and tear down a session.

In Claim 2, Fortman combined with Diachina, teaches about a method as recited in claim 1 wherein the server system determines that a notification is to be sent to the client system by receiving a message from the client system (Fortman Col 2, lines 50-55). (This is the act of subscribing)

In Claim 3, Fortman combined with Diachina teaches about a method as recited in claim 1 wherein the server system monitors for the occurrence of events by executing separate modules "universal mailbox" to monitor individual events (Fortman Col 4, lines 45-67, Col 3, lines 50-60). A universal system has to be equipped with a plurality of modules to be able to process all the different protocols.

In Claim 4, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 1 wherein in the connectionless protocol is User Datagram Protocol (Gupta Col 1, lines 20-30) (Gupta Col 2, lines 5-15). The User Data Protocol is the connectionless protocol of choice for internet operation

In Claim 5, Fortman combined with Diachina teaches about a method as recited in claim 1 wherein the notification data further comprises data that notifies the client system that the

server has additional data associated with the occurrence of the event (Fortman Col 2, lines 45-55).

In Claim 6, Fortman and Diachina combined with Gupta, teaches a method as recited in claim 1 wherein the connection-oriented protocol is Transmission Control Protocol (Gupta Col 1, lines 20-30) (Gupta Col 2, lines 5-15). The Transmission Control Protocol is the connection-oriented protocol of choice for internet operation.

In Claim 7, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center", a client system "subscriber", and one or more other network devices (Fortman Fig 2), wherein the server system monitors the occurrence of events, sends notification data to the client system , when notification has been requested (subscribing), after one of the monitored events occurs, and may have client data requiring transmission to the client system, a method for efficiently sending notification to the client system when the event has occurred, so as to preserve the processing capacity of the server system and the client system, and so as to preserve bandwidth on the network system, the method comprising (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art) (Fortman Col 2, lines 45-55):

an act of the server system determining that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55, Col 3, lines 60-65);

an act of the server system sending notification data using a connectionless protocol to the client system, if one of the monitored events occurs (covered in claim 1); and

a step for sending client data, after the notification data is sent, to the client system using a connection-oriented protocol "ISDN" (Fortman Col 2, lines 45-55, Col 3, lines 60-65).

In Claim 8, Fortman combined with Diachina, teaches about a computer program product for implementing, in a network system including a server system "Message Center", a client system "subscriber" , and one or more other network devices (Fortman Fig 2), wherein the server system monitors the occurrence of events, sends notification data to the client system, when notification has been requested (subscribing), after one of the monitored events occurs, and may have client data requiring transmission to the client, a method for efficiently sending notification to the client system when the event has occurred (Col 2, lines 45-55), so as to preserve the processing capacity of the server system and the client system, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carrying computer-executable instructions that, when executed at the server system, cause the server system to perform the following (Fig 6):

an act of causing the server system to determine that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Col 2, lines 45-55);

an act of causing the server system to send notification data using a connectionless protocol to the client system, if one of the monitored events occurs (covered in claim 1);

an act of causing the server system to attempt to receive contact from the client system using a connection-oriented protocol "ISDN" when the server system has client data to transmit to the client system (Col 2, lines 45-55) (Col 3, lines 60-65); and

an act of causing the server system to transmit the client data to client system using the connection-oriented protocol, after the server system receives contact using the connection-oriented protocol (Col 2, lines 45-55) (Col 3, lines 60-65).

In Claim 9, Fortman combined with Diachina, teaches about a computer program product for implementing (Fig 6), in a network system including a server system "Message Center", a client system "subscriber", and one or more other network devices (Fortman Fig 2), wherein the server system monitors the occurrence of events, sends notification data to the client system, when notification has been requested (subscribing), after one of the monitored events occurs, and may have client data requiring transmission to the client system, a method for efficiently sending notification to the client system when the event has occurred (Fortman Col 2, lines 45-55), so as to preserve the processing capacity of the server system and the client system,

and so as to preserve bandwidth on the network system. (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carrying computer-executable instructions that, when executed at the server system, cause the server system to perform the following (Fortman Fig 6):

an act of causing the server system to determine that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

an act of causing the server system to send notification data using a connectionless protocol to the client system, if one of the monitored events occurs (covered in claim 1); and

a step for causing the server system to send client data, after the notification data is sent, to the one of the plurality of client systems using a connection-oriented protocol "ISDN" (Col 2, lines 45-55) (Col 3, lines 60-65).

In Claim 19, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center", and a plurality of client systems "subscribers" (Fortman Col 3, lines 50-65), wherein individual client systems from among the plurality client systems can request notification of the occurrence of one or more of a plurality of events and wherein the server system monitors to determine if any of a plurality of events has occurred and wherein the server system must send notification to individual client systems for every one of the plurality of events that occurs for which individual client systems have requested notification (Fortman Col 2, lines 45-55), a method for efficiently notifying one of the plurality of client systems of the occurrence of more than one event from among the plurality of

events so as to preserve the processing capacity of the server system and the plurality of client systems, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the method comprising:

an act of the server system determining that a notification is to be sent to each individual client system from among the plurality of client systems that requested notification of the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

an act of the server system associating a separate storage location "subscriber mailbox" with each client and using the separate storage locations to store data on the occurrence of events which must be sent to each of the associated clients (Fortman Col 4, lines 60-67)

an act of server system appending to the separate storage locations the occurrence of successive events requested by individual client systems in order to save a record of the occurrence of the events until notification is ready to be sent to the individual client systems of the occurrence of all the saved events (Fortman Col 5, lines 1-5); and

an act of the server system using a connectionless protocol to send separately stored data to one of the plurality of client systems in order to attempt to simultaneously notify the one of the plurality of client systems of the occurrence of all the events for which the one of the plurality of clients has requested notification (covered in claim 1).

In Claim 20, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 19 wherein the separate storage locations are included on one or more mass storages device associated with the server system (Fortman Col 4, lines 45-60).

In Claim 21, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 19 wherein the server system monitoring for the occurrence of events comprises executing separate modules to monitor individual events (Fortman Col 4, lines 45-67, Col 3, lines 50-60).

In Claim 22, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 19 wherein the connectionless protocol is User Datagram Protocol (Gupta Col 1, lines 20-30).

In Claim 23, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 22 wherein the simultaneous notification comprises receipt of one User Datagram Protocol packet (Fortman Col 2, lines 45-55).

In Claim 24, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center", and a plurality of client systems "subscriber", wherein individual client systems from among the plurality of client systems can request notification of the occurrence of one or more of a plurality of events and wherein the server system monitors to determine if any of a plurality of events has occurred and wherein the

server system must send notification to individual client systems for every one of the plurality of events that occurs for which the individual client systems have requested notification (subscribing) (Fortman Col 2, lines 45-55), a method for efficiently notifying an individual client system of the occurrence of more than one event from among the plurality of events so as to preserve the processing capacity of the server system and the plurality of client systems, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these features are covered by method of the prior art), the method comprising:

an act of the server system determining that a notification is to be sent to each individual client system from among the plurality of client systems that requested notification of the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

a step for the server system to separately store (Fig 3) , for each of the plurality of client systems, data relating to the occurrence of the events for which each of the plurality of client systems requested notification (Fortman Col 4, lines 60-67);

an act of the server system using a connectionless protocol to send separately stored data to one of the plurality of client systems in order to attempt to simultaneously notify the one of the plurality of client systems of the occurrence of all the events for which the one of the plurality of clients has requested notification (Fortman Fig 2), (covered in claim 1).

In Claim 25, Fortman and Diachina combined with Gupta, teaches about a computer program product for implementing, in a network system including a server system "Message Center" , and a plurality of client systems "subscribers" (Fortman Fig 2), wherein individual client systems from among the plurality client systems can request notification of the occurrence of one or more of a plurality of events and wherein the server system monitors to determine if any of a plurality of events has occurred and wherein the server system must send notification to individual client systems for every one of the plurality of events that occurs for which individual client systems have requested notification (Fortman Col 2, lines 45-55), a method for efficiently notifying one of the plurality of client systems of the occurrence of more than one event from among the plurality of events so as to preserve the processing capacity of the server system and the plurality of client systems, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carrying computer-readable instructions, that when executed at the server system, cause the server system to perform the following (Fig 6):

an act of determining that a notification is to be sent to each individual client system from among the plurality of client systems that requested notification of the occurrence of one of the monitored events (Fortman Col 5, lines 5-45);

an act of associating a separate storage location "subscriber mailbox" with each client system (Fortman Col 4, lines 50-67), the server system using the separate storage locations to

store data on the occurrence of events which must be sent to each of the client systems (Fortman Col 5, lines 1-5);

an act of appending to the separate storage locations the occurrence of successive events requested by individual client systems in order to save a record of the occurrence of the events until the server system is ready to send notification to the individual client systems of the occurrence of all the saved events (Fortman Col 4, lines 60-67); and

an act of using a connectionless protocol to send the contents of one of the separate storage locations to the client system associated with the one of the separate storage locations in order to attempt to simultaneously notify the associated individual client system of the occurrence of all the events stored in the separate storage location (covered in claim 1).

In Claim 26, Fortman and Diachina combined with Gupta, teaches about a computer program product for implementing, in a network system including a server system "Message Center", and a plurality of client systems "subscriber" (Fortman Fig 2), wherein individual client systems from among the plurality client systems can request notification of the occurrence of one or more of a plurality of events and wherein the server system monitors to determine if any of a plurality of events has occurred and wherein the server system must send notification to individual client systems for every one of the plurality of events that occurs for which individual client systems have requested notification (subscribing) (Fortman Col 2, lines 45-55), a method for efficiently notifying one of the plurality of client systems of the occurrence of more than one event from among the plurality of events so as to preserve the processing capacity of the server

system and the plurality of client systems, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carrying computer-readable instructions, that when executed at the server system, cause the server system to perform the following (Fortman Fig 6):

an act of determining that a notification is to be sent to each individual client system from among the plurality of client systems that requested notification of the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

a step for separately storing for each of the plurality of client systems data relating to the occurrence of the events for which each of the plurality of client systems requested notification (Fortman Col 4, lines 60-67);

an act of using a connectionless protocol to send separately stored data to one of the plurality of client systems in order to attempt to simultaneously notify the one of the plurality of client systems of the occurrence of all the events for which the one of the plurality of clients has requested notification (covered in claim 1).

In Claim 27, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center", and a client system "subscriber", wherein the server system monitors the occurrence of events, sends notification to the client system when one of the monitored events occurs, and may have client data requiring transmission to the

client system (Fortman Col 2, lines 45-55), a method for efficiently notifying applications associated with the client system when an event has occurred so as to preserve the processing capacity of server system and the client system, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the method comprising:

an act of the client system determining that one or more of a plurality of applications associated (voice, fax, mail application etc) etc with the client system requesting notification of an occurrence of an event (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 50-65);

an act of the client system receiving one notification from the server system using a connectionless protocol notifying the client system that the event the one or more of the of the plurality of applications requested notification of occurred (covered in claim 1);

an act of the client system transmitting the received notification to the one or more of the plurality of applications (Fortman Col 2, lines 45-55); and

an act of the client system attempting to create a connection using a connection-oriented protocol "ISDN" and receive client data associated with the one or more of the plurality of applications over the connection (Col 2, lines 45-55) (Col 3, lines 60-65).

In Claim 28, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 27 wherein the server system monitoring for the occurrence of events comprises executing separate modules to monitor individual events (Fortman Col 4, lines 45-67).

In Claim 29, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 27 wherein the act of the client system determining that one or more of a plurality of applications associated with the client system requested notification of the event comprises a module to detect the one or more of a plurality of applications (Fortman Col 4, lines 45-67).

In Claim 30, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 29 wherein the act of transmitting the received notification to one or more of the plurality of applications comprises the module transmitting the received notification (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67).

In Claim 31, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 27 wherein the connectionless protocol is the User Datagram Protocol (Gupta Col 1, lines 20-30).

In Claim 32, Fortman and Diachina combined with Gupta, teaches about a method as recited in claim 27 wherein the connection-oriented protocol is Transmission Control Protocol (Gupta Col 1, lines 20-30).

In Claim 33, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center", and a client system "subscriber", wherein the server system monitors the occurrence of events, sends notification to the client system when

one of the monitored events occurs (Fortman Col 2, lines 45-55), and may have client data requiring transmission to the client system (subscription), a method for efficiently notifying applications associated with the client system when an event has occurred (Fortman Col 2, lines 45-55), so as to preserve the processing capacity of server system and the client system, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art),, the method comprising:

an act of the client system determining that one or more of a plurality of applications associated with the client system requesting notification of an occurrence of an event (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67);

a step for the client system to distribute a received notification to the one or more of the plurality of applications, the notification indicating that the event occurred (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67); and

an act of the client system attempting to create a connection using connection-oriented protocol "ISDN" and receive client data associated with the one or more of the plurality of applications over the connection (Col 2, lines 45-55) (Col 3, lines 60-65).

In Claim 34, Fortman and Diachina combined with Gupta, teaches about a computer product claim for implementing, in a network system including a server system "Message Center", and a client system "subscriber", wherein the server system monitors the occurrence of events, sends notification to the client system when one of the monitored events occurs(Fortman

Col 2, lines 45-55), and may have client data requiring transmission to the client system (subscription), a method for efficiently notifying applications associated with the client system when an event has occurred so as to preserve the processing capacity of server system and the client system, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carry computer executable-instructions that, when executed at the client computer, cause the client computer to perform the following (Fortman Fig 6):

an act of determining that one or more of a plurality of applications associated with the client system has requested notification of the occurrence of an event (Fortman Col 2, lines 45-55) (Fortman Col 2, lines 45-55);

an act of receiving one notification from the server system using a connectionless protocol notifying the client system that the event the one or more of the of the plurality of applications requested notification of occurred (covered in claim 1);

an act of transmitting the received notification to the one or more of the plurality of applications (Fortman Col 2, lines 45-55); and

an act of attempting to create a connection using a connection- oriented protocol and receive client data associated with the one or more of the plurality of applications over the connection (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 60-65).

In Claim 35, Fortman and Diachina combined with Gupta, teaches about a computer product claim for implementing, in a network system including a server system "Message Center", and a client system "subscriber", wherein the server system monitors the occurrence of events, sends notification to the client system when one of the monitored events occurs, and may have client data requiring transmission to the client system (Fortman Col 2, lines 45-55), a method for efficiently notifying applications associated with the client system when an event has occurred so as to preserve the processing capacity of server system and the client system, and so as to preserve bandwidth on the network system(These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer product comprising:

a computer-readable medium carry computer executable-instructions that, when executed at the client computer, cause the client computer to perform the following (Fortman Fig 6):

an act of determining that one or more of a plurality of applications associated with the client system has requested notification of the occurrence of an event (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67);

a step for distributing a received notification to the one or more of the plurality of applications, the notification indicating that the event occurred (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67); and

an act of attempting to create a connection using a connection oriented protocol "ISDN" and receive client data associated with the one or more of the plurality of applications over the connection (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 60-65).

Claims 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,987,100 by Fortman et al and US patent 6,704,786 by Gupta et al and US Patent No. 6,577,618 by Diachina in view of US Patent No. 6,070,184 by Blount et al.

In Claim 10, Fortman and Diachina combined with Gupta, teaches about a network system including a server system "Message Center" and a client system "subscriber", wherein the server system monitors the occurrence of events and sends notification data to the client system when one of the monitored events occurs and wherein the client system attempts to establish a communication link to the server system using a connection oriented protocol "ISDN" (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 60-65), after the client system receives event notification from the server system (Fortman Col 2, lines 45-55), when the server system needs to send additional data to the client system, a method for the server system to repeatedly attempt notification of the client system so as to preserve the processing capacity of the server system and the client system, and so as to preserve bandwidth on the network system, the method comprising:

an act of the server system determining that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

an act of the server system sending notification data to the client system using a connectionless protocol to notify the client system of the occurrence of a monitored (covered in claim 1); and

an act of the server system sending additional data to the client system if a communication link using a connection-oriented protocol is established (Fortman Col 2, lines 45-55).

but does not explicitly teach an act of the server system resending the notification data using a connectionless protocol to the client system at time intervals which, at least for a time, increase after each failure to detect the establishment of a communication link using a connection-oriented protocol from the client system, wherein the resending occurs until a communication link using a connection-oriented protocol is established from the client system or until a timeout period has elapsed.

The backoff algorithm is well known in data message service. The backoff algorithm is used to prevent congestion whenever a network is having problem delivering a message as disclosed by Blount (Col 14, lines 40-55).

It would have been obvious at the time of the invention for some one of ordinary skill to use a backoff algorithm to prevent congestion in a network delivery system.

The backoff algorithm is a proven method used to prevent congestion on a network. By increasing the time after each attempt to contact the client, a server is free to attend to other clients that are available without over burdening itself.

In Claim 11, Fortman, Gupta, Diachina and Blount combined, teaches about a method as recited in claim 10 wherein the server system determines that notification is to be sent to the client system by receiving a message from the client system (subscribing) (Fortman Col 2, lines 45-55).

In Claim 12, Fortman, Gupta, Diachina and Blount combined, teaches about a method as recited in claim 10, wherein the server system monitors for the occurrence of events by executing separate modules to monitor individual events (Fortman Col 2, lines 45-55) (Fortman Col 4, lines 45-67).

In Claim 13, Fortman, Gupta, Diachina and Blount combined, teaches about a method as recited in claim 10, wherein the connectionless protocol is User Datagram Protocol (Gupta Col 1, lines 20-30).

In Claim 14, Fortman, Gupta, Diachina and Blount combined, teaches about a method as recited in claim 10, wherein the time interval doubles after each successive failure to establish communication (Blount covered in claim 10).

In Claim 15, Fortman, Gupta, Diachina and Blount combined, teaches about a method as recited in claim 10, wherein the connection-oriented protocol is Transmission Control Protocol (Gupta Col 1, lines 20-30).

In Claim 16, Fortman, Gupta, Diachina and Blount combined, teaches about a network system including a server system "Message Center", and a client system "subscriber", wherein the server system monitors the occurrence of events and sends notification data to the client system when one of the monitored events occurs (Fortman Col 2, lines 45-55) and wherein the

client system establishes a communication link to the server system using a connection-oriented protocol (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65), after the client system receives event notification from the server system, when the server system needs to send additional data to the client system (Covered in Claim 10), a method for the server system to repeatedly attempt notification of the client system so as to preserve the processing capacity of the server system and the client system, and so as to preserve bandwidth on the network system (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the method comprising:

an act of the server system determining that a notification is to be sent the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

a step for the server system resending notification data, using a connectionless protocol, to the client system at predefined time intervals which, at least for a time, increase, in an attempt to notify the client system a monitored event has occurred and a communications link can be received from the client system using a connection-oriented protocol (covered in claim 1and 10); and

an act of the server system sending additional data to the client system if a communication link using a connection-oriented protocol "ISDN" is established (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65).

In Claim 17, Fortman, Gupta, Diachina and Blount combined, teaches about a computer program product for implementing, in a network system including a server system "Message Center" and a client system "subscriber", wherein the server system monitors the occurrence of events and sends notification data to the client system when one of the monitored events occurs and wherein the client system establishes a communication link to the server system using a connection-oriented protocol "ISDN" (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65), after the client system receives event notification from the server system, when the server system needs to send additional data to the client system, a method for the server system to repeatedly attempt notification of the client system so as to preserve the processing capacity of the server system and the client system (Covered in Claim 10), and so as to preserve bandwidth on the network system. (These features are inherent from the above method, as sending a notification instead of a whole message, reduces the traffic between server system and client system. The reduce traffic lead to the reduction in server processing. All these functions are covered by method of the prior art), the computer to product comprising:

a computer-readable medium carrying computer-executable instructions that, when executed at the server system, cause the server system to perform the following (Fortman Fig 6):

an act of determining that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

an act of sending notification data the client system using a connectionless protocol to notify the client system of the occurrence of a monitored event and (covered in claim 1);

an act of resending the notification data using a connectionless protocol to the client system at time intervals which, at least for a time, increase after each failure to detect the

establishment of a communication link using a connection-oriented protocol from the client system, wherein the resending occurs until a communication link using a connection- oriented protocol is established from the client system or until a timeout period has elapsed (covered in claim 1and 10); and

an act of sending additional data to the client system if a communication link using a connection-oriented protocol is established (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65).

In Claim 18, Fortman, Gupta, Diachina and Blount combined, teaches about a computer program product for implementing, in a network system including a server system "Message Center" and a client system "subscriber", wherein the server system monitors the occurrence of events and sends notification data to the client system when one of the monitored events occurs and wherein the client system establishes a communication link to the server system using a connection-oriented protocol (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65), after the client system receives event notification from the server system, when the server system needs to send additional data to the client system, a method for the server system to repeatedly attempt notification of the client system so as to preserve the processing capacity of the server system and the client system (Covered in Claim 10), and so as to preserve bandwidth on the network system, the computer product comprising:

a computer-readable medium carrying computer-executable instructions that, when executed at the server system, cause the server system to perform the following (Fortman Fig 6):

an act of determining that a notification is to be sent to the client system upon the occurrence of one of the monitored events (Fortman Col 2, lines 45-55);

a step for resending notification data to the client system at time intervals which, at least for a time, increase, using a connectionless protocol in an attempt to notify the client system a monitored event has occurred and a communications link can be received using a connection-oriented protocol (covered in claim 1and 10); and

an act of sending additional data to the client system if a communication link using a connection-oriented protocol is established (Fortman Col 2, lines 45-55) (Fortman Col 3, lines 50-65).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,041,327 by Glitho et al, teaches about an implementation of notification capabilities in relational databases.

US Patent No. 6,061,570 by Janow, teaches about Unified message announcing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571) 272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM A CUCHLINSKI JR can be reached on (571) 272-3925

. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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